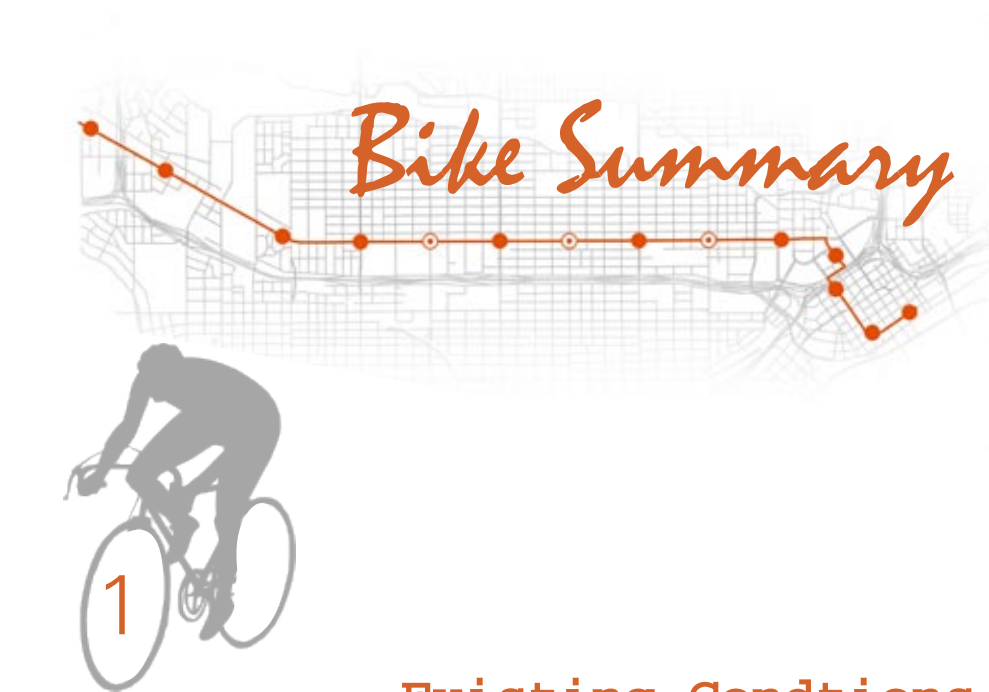


Summary & Key Actions



This Bike Walk Action Plan was prepared to maximize biking and walking within Saint Paul's Central Corridor and to enhance access to the Central Corridor light rail transit (LRT) line which is scheduled to be constructed between downtown Saint Paul and downtown Minneapolis beginning in 2010. The LRT line will greatly expand mobility options and will change the environment of University Avenue, the State Capitol area and downtown Saint Paul. The bicycle and pedestrian improvements recommended in this Plan, coupled with LRT access and bus system changes, will create tremendous new non-vehicular transportation options.

This Plan contains an evaluation of existing pedestrian and bicycling conditions, bikeway and walkway framework plans and recommended priority actions to improve biking and walking.



Existing Condtions

The Saint Paul Center Corridor is a diverse area spanning from the Saint Paul/Minneapolis border on the west to the east edge of downtown Saint Paul and centered on the alignment of the future Central Corridor LRT line which follows University Avenue through the State Capitol area and into downtown Saint Paul.

From a biking and walking perspective, the Central Corridor has many assets and many needs. There is good pedestrian access to most of the Corridor along a network of sidewalks following the street grid. However, sidewalks on most busy streets are less than friendly environments for pedestrians as they lack buffers from traffic, have few basic amenities like shade or seating and residents have concerns about the safety of crossing some busy intersections. The grid street pattern contributes to a good network of low traffic streets, but significant barriers to biking exist in busy roads, railroads and highway crossings. Saint Paul and the Central Corridor have few bike facilities such as off-street trails or on-street bike lanes. A summary of existing bike-walk conditions is listed below.

Pedestrian Friendliness

Table 1.1 Pedestrian Friendliness Summary

	West of Prior	East of Prior	Down-town	Rail Crossings	Highway Crossings
Intolerant	●			●	
Tolerant		●	●		●
Friendly			●		
Pedestrian Place			●		

Bike Friendliness

Table 1.2 Bike Friendliness Summary

	Major Streets	Minor Streets	Resi-dential Streets	Access to Bike-ways	Presence of Way-finding & Route Marking	Pres-ence of Support Facili-ties
Intolerant	●			●	●	●
Tolerant		●	●	●	●	
Friendly			●			

Barriers

I-94, railroads, I-35E, I-94 vehicle bridges, space limitations in many street corridors.

Key Features

Neighborhood streets with sidewalks, Summit Ave. bike lanes, I-94 ped/bike bridges, Vento trail, Shepard trail, skyway system downtown, few bike trails or bike lanes, few pedestrian or bike friendly streets. Some pedestrian-friendly streets downtown such as St. Peter, Wabasha, Exchange and 4th . Pedestrian friendly places downtown such as Rice Park, Mears Park, Farmers Market, 7th Place, Wacouta Commons, etc.

Key Areas of Change

LRT route, redesigned and narrowed University Avenue (lanes and sidewalks), future Ayd Mill/Midtown multi-use trail, future redevelopment near LRT stations.



Caption

Allocation of Transportation Resources

- 10% of all trips are bike or walk trips
- 13% of traffic fatalities are pedestrians or bicyclists
- 1% of Federal transportation funding goes to bike/ pedestrian facilities



Bikeway Framework Plan

The Bikeway Plan envisions an interconnected system of regional, commuter and local bikeways relying primarily on lower volume streets. The regional bikeways would use off-streets paths and dedicated on-street bike lanes. The regional routes are designed to create a bikeway loop around the Central Corridor and to connect to other regional bikeways. The commuter routes would have bike lanes or shared marked bike routes (sharrows), where room for dedicated bike lanes is not possible. The local bikeway routes would be bike boulevards (low volume residential streets with traffic calming) which would connect to LRT stations and key community destinations. Refuge islands would be added at non-signalized crossings of major streets.

Bike lanes and sharrows would be added to downtown routes and bikeways and pedestrian oriented streets would receive traffic calming treatments. Key bikeway connections to downtown would be improved (Kellogg, Jackson, and to the Vento Trail and Sam Morgan Trail).

A system of bike route way-finding signage and pavement markings will tie the system together, directing cyclists and raising awareness for motorists.



Prior and Chatsworth - Before

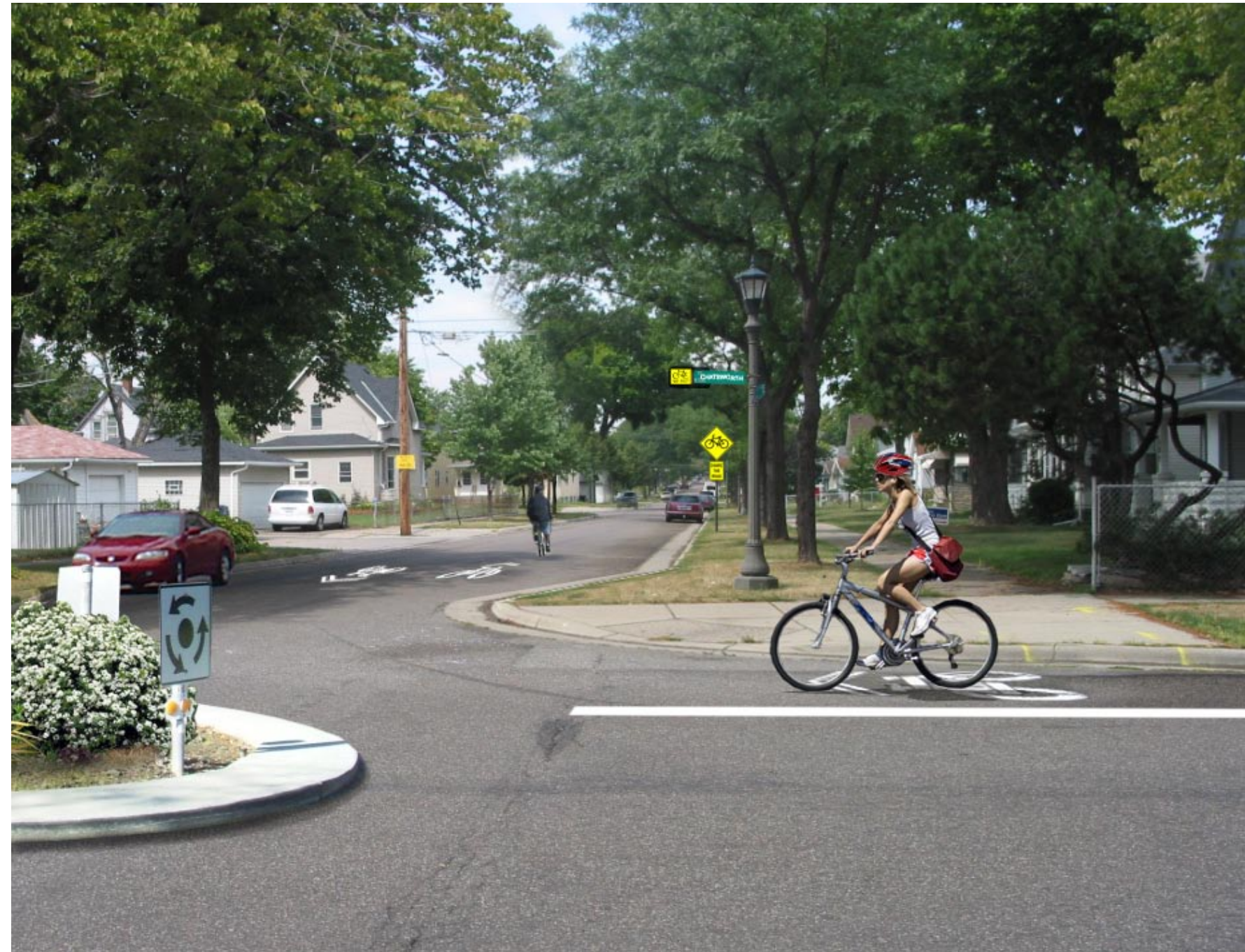
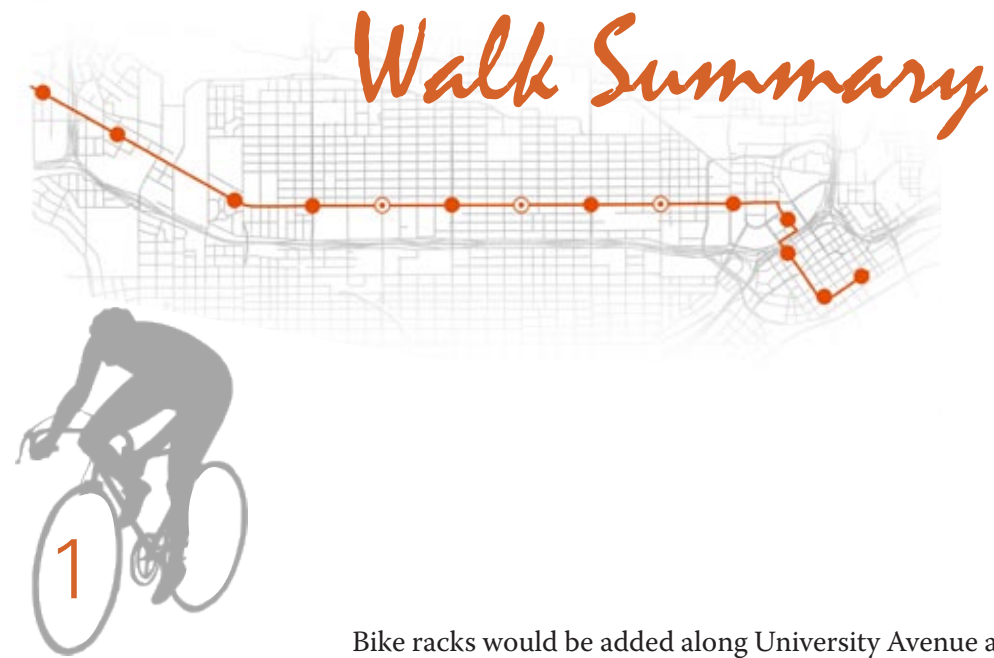


Photo Visualization Prior and Chatsworth Bikeways - After





Bike racks would be added along University Avenue and at local North-South street connections to LRT stations. Secure bike storage (indoors, in parking structures or in bike stations) would be added near the Raymond, Snelling, Dale, Rice, 4th/Cedar and Union Depot LRT stations. Bike stations are envisioned as full service facilities with secure bike storage, bike repair, showers and lockers.

A system of bike route way-finding signage and pavement markings will tie the system together, directing cyclists and raising awareness for motorists.

Key Elements of the Bikeway Plan

- » Create a network of bikeways on lower volume streets (regional, commuter and local bikeways).
- » Create a regional bikeway loop around the Central Corridor.
- » Add commuter bike routes along secondary streets (E-W and N-S). Use existing pedestrian/bike bridges over I-94.
- » Improve bike connections in and out of downtown.
- » Calm vehicular traffic downtown and on local bike boulevards.
- » Create landscaped bike and pedestrian friendly streets connecting to University Avenue and in downtown.
- » Install a comprehensive bike route way-finding system and secure bike parking.
- » Create a new off-road multi-use trail (Midtown Greenway along the railroad corridor).

Walkway Framework Plan

The Walkway Plan is designed to complete the sidewalk network and make downtown and key corridor streets more inviting to pedestrians.

Key Elements of the Walk Plan

- » Make walkways along major streets and in downtown more pedestrian friendly by implementing wider sidewalks with high quality landscaping, and adding decorative pavement, street furnishings and pedestrian scale overhead lighting.
- » Make crossing streets safer and more convenient by adding more traffic signals, adjusting walk time at signals, installing pedestrian refuge islands, heightening traffic law enforcement, using pedestrian-oriented intersection design and installing traffic-calming strategies such as narrowing streets and travel lanes, expanding visual corridors and reducing speed limits.
- » Filling key sidewalks gaps, particularly west of Fairview.
- » Creating more pedestrian-friendly destinations near LRT stations.
- » Improve the look and feel of pedestrian/bike bridges across I-94.
- » Install a comprehensive pedestrian-scale way-finding system.



Caption



Caption

Recommended Priority Actions

Bike-Improvements:

- » Complete the Pelham/Raymond bikeways.
- » Build the Midtown Greenway bike trail.
- » Add bike lanes on Pierce Butler and off road bike trail on the potential St. Anthony Greenway connection.
- » Add striped bike lanes to Griggs.
- » Add bike lanes to Prior.
- » Add bike lanes to Mackubin.
- » Create a combination of shared off road bike walk and on street bike lanes on Kellogg from John Ireland to Smith.
- » Implement a “road diet” to narrow Sibley/Jackson and add striped bike lanes.
- » Add streetscaping along 5th and 6th Streets to calm traffic and include bike lanes/sharrows.
- » Turn Charles Avenue from Prior to Makubin into a bike boulevard.
- » Add a bikeway on Territorial to connect Pierce Butler to the U of M transitway.
- » Add wayfinding signs and pavement markings on Phase one demonstration area.
- » Build bike stations at the 4th/Cedar and Union Depot LRT stations and work to add secure bike parking near Raymond, Snelling and Rice Street LRT stations.

Pedestrian Improvements:

- » Add high quality streetscape from Wabasha to Cedar on 5th, 6th and 4th Streets.
- » Improve streetscape from Mears Park to the Mississippi River on Sibley.
- » I -94 pedestrian/bike bridge improvements - lighting, railings, landscaping, safer approaches, signed crosswalks at Concordia/ St. Anthony.
- » Pedestrian Improvements on Prior (I-94 to University).
- » Add new sidewalks to fill major gaps in the infill area:
 - Create a walkway route extending from Charles Avenue East of Fairview Avenue.
 - Create green street connections between Charles and University at LRT station platforms.
 - Add walkways with streetscape buffers on Cretin by Town and Country golf course.
 - Add sidewalks with streetscape buffers on Prior North of University.
 - Territorial (Add)

Pedestrian and Bicycle Friendly Recommendations:

- » Adopt a Complete Streets ordinance/policy to enable safe, attractive, and comfortable access and travel for all users (pedestrians, bicyclists, motorists, and public transport).
- » Hire full time bicycle, pedestrian, and complete streets coordinators and part time seasonal bike ambassadors (for promotion, outreach and awareness).
- » Expand bike walk promotion and awareness with partnership events (i.e. car free street closure days, bike-walk carnivals, etc.), products (bike route maps, on-line bike routes) and programs with partners such as Smart Trips, schools, bike organizations, neighborhoods, the Metropolitan Council and others.
- » Increase enforcement of traffic laws (for vehicles, pedestrians and cyclists) to calm traffic and create a safer bike and pedestrian environment.



Caption



Bikeway Framework



Regional bikeways

- » Regional routes make connections to or are part of city-wide or regional bikeway system
- » Routes accommodate all users from experienced to novice
- » Routes have shared transportation and recreation functions
- » Routes connect cities and to major City and regional destinations and to commuter and local bikeways
- » Focus is on safety, user experience, improved travel time and route continuity
- » All routes have a vehicle free designated bike zone –bike lanes and/or off road trails
- » There is significant investment in landscaping, way finding and amenities
- » Bikers given priority at minor crossing (stop signs) and major intersections are signaled

Preferred Regional Bikeway Treatments

- » Off-street Trails
- » Dedicated Bike Lanes
- » Traffic Calming
- » Safe Crossings
- » Signage & Markings
- » Way Finding
- » High Quality Amenities
- » High Quality Landscaping



Off-street trail

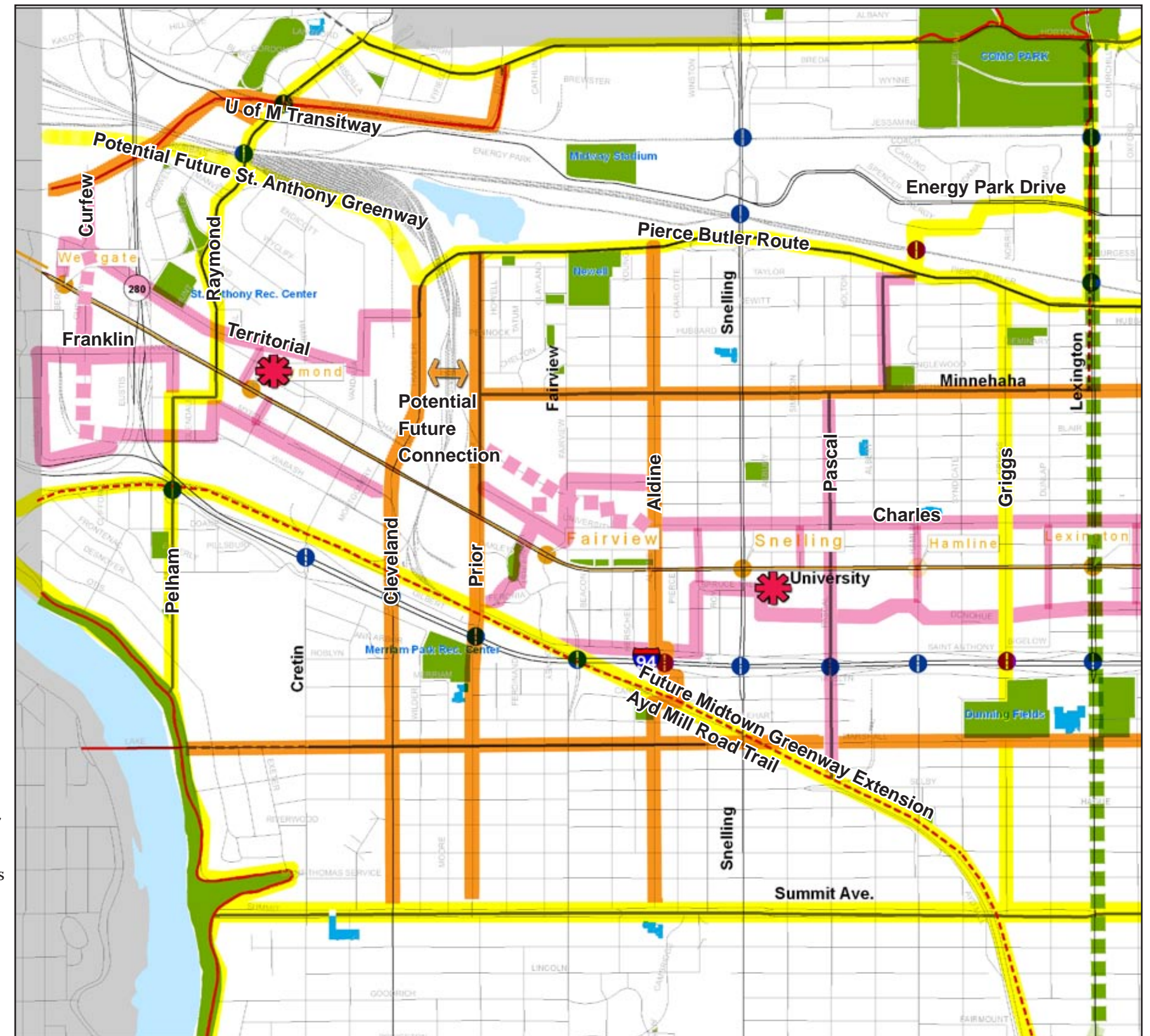


Dedicated bike lane

Commuter Bikeways

- » Commuter routes are used to access the main routes and provide for continuous movement across barriers (highways, railroads, and major intersections) within the Central Corridor
- » Routes focus on commuter movement – average to experienced riders
- » Routes link residential areas to employment, shopping and transit
- » Focus on route continuity, safety and way finding
- » Ideal treatment is a vehicle free designated bike zone – bike lanes
- » Bikers given priority at minor crossings (stop signs) and major intersections are signaled
- » Biker movement and safety given priority over vehicle parking desires

Figure 5.1: Bikeway Framework



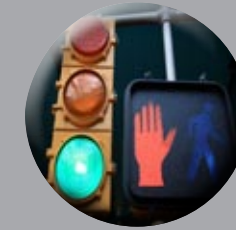


Preferred Commuter Bikeway Treatments

- » Dedicated Bike Lanes
- » Traffic Calming
- » Safe Crossings
- » Signage & Markings
- » Bike Storage
- » Personal Facilities
- » Way Finding
- » Amenities
- » Landscaping



Dedicated bike lane



Signal crossings



Local Bikeways

- » Local routes are for bikers going short distances between home, business, and transit stops and providing connections from Regional and Commuter routes to local destinations
- » Routes accommodate experienced to average users
- » Focus on traffic calming and way finding
- » Routes have a shared vehicle/bike zone such as Bike Boulevard (shared bike and vehicular traffic) or sharrows markings/ pavement symbols
- » Bikers given priority at minor crossings (stop signs) but may not have signals at major intersections. Goal of a "safe harbor" median area where local bikeway routes cross major streets. Explore use/need for advance crossing devices "HAWK" and others.
- » Routes may jog and may not be continuous across highway barriers, again the focus is on short trips, not through movement

Preferred Local Bikeway Treatments

- » Bicycle Boulevards
- » Traffic Calming
- » Safe Crossings
- » Signage & Markings
- » Bike Storage
- » Way Finding
- » Landscaping



Safe crossings



Bike boulevard

Walk Framework

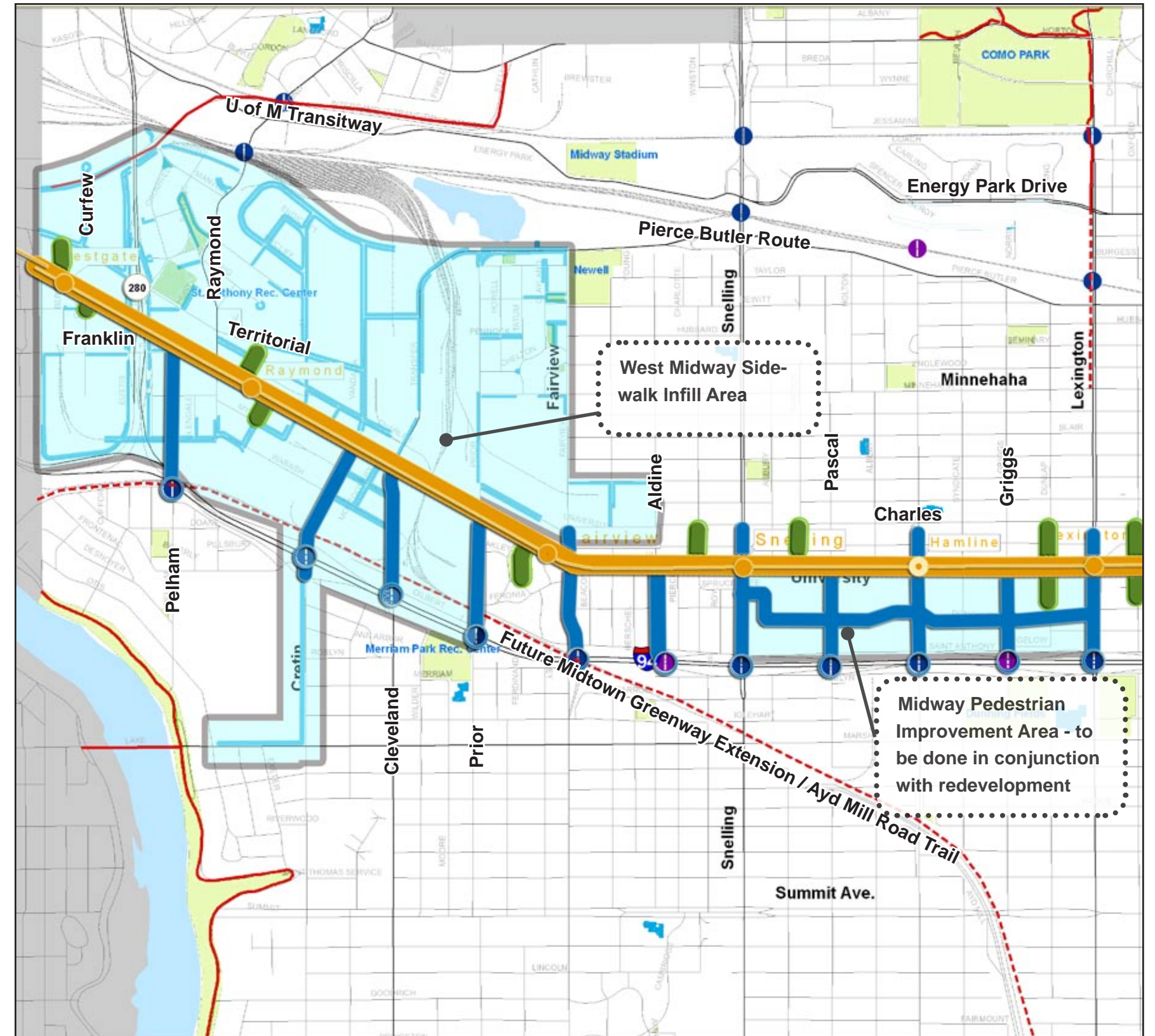


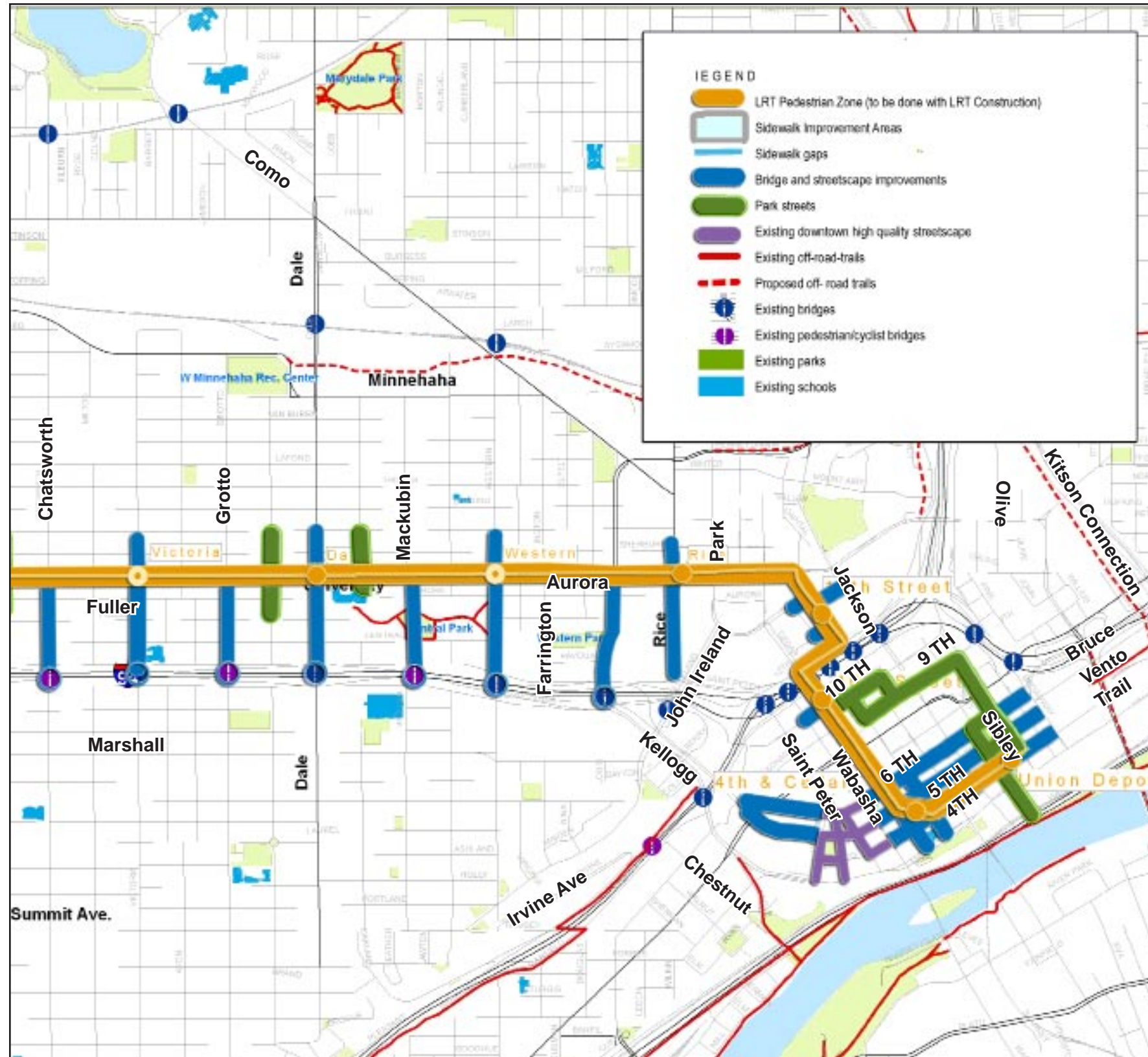
Eliminating sidewalk gaps on the west end of the corridor will improve pedestrian connectivity from work places to LRT stations

Redevelopment in the regional midway shopping district should better accommodate pedestrians with safe walkways from University Ave to building entrances.



Figure 7.2 Walk Framework





Downtown, extending the high quality streetscape east to Cedar on 4th, 5th and 6th Streets is a high priority.

Park streets linking downtown residential areas to downtown parks will make the city more livable.





Figure 9.1: Priority Bike-Walk Recommendations

